pale lines, and having a diamond-shaped shield back of the head. The chrysalis is thick and conformed to the generic type of structure. The color is pale green, striped and dotted with pale yellow on the abdomen. The caterpillar feeds in the Yosemite Valley upon the young leaves of the live-oak (*Quercus dry so-lepis*).

The insect is found in California and Nevada.

(2) Thecla crysalus, Edwards, Plate XXIX, Fig. n, $ (The Colorado Hair-streak).

Butterfly.—The wings on the upper side are royal purple, broadly margined with black. On the fore wings a broad oblique black band runs from the middle of the costa to the middle of the outer margin. At the inner angles of both wings are conspicuous orange spots. On the under side the wings are fawn, marked with white lines edged with brown. The orange spots reappear on this side, but at the anal angle of the hind wings are transformed to red eye-spots, pupiled with black and margined with metallic green. The hind wings are tailed. Expanse, 1.50 inch.

The variety citima, Henry Edwards, differs in being without the orange spots and having the ground-color of the under side ashen-gray. Specimens connecting the typical with the varietal form are in my possession.

Early Stages.—Unknown.

Found in southern Colorado, Utah, Arizona, and southern California.

(3) Thecla halesus, Cramer, Plate XXIX, Fig. 9, $ (The Great Purple Hair-streak).

Butterfly.—The hind wings have a long tail, and are lobed at the anal angle. The wings are fuscous, iridescent bluish-green at the base. The body is bluish-green above. On the under side the thorax is black,spotted with white,the abdomen bright orange-red. The wings on the under side are evenly warm sepia, spotted with crimson at their bases, glossed with a ray of metallic green

on the fore wings in the male sex, and in both sexes splendidly adorned at the anal angle by series of metallic-green and iridescent blue and red spots. Expanse, 1.35-1.50 inch.

Early Stages.—All we know of them is derived from the drawings of Abbot, published by Boisduval and Leconte, and this is but little. The caterpillar is said by Abbot to feed on various oaks.